## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Currently Amended) A vaccine composition comprising pharmaceutically acceptable particles selected from polymeric microcapsules or liposomes, the particles comprising a biologically active agent that generates a protective immune response in an animal to which it is administered; in combination with an adjuvant chemical which increases the effect of the biologically active agent by acting as an immunostimulant, said adjuvant chemical being selected from the group consisting of:
  - A) polyornithine,
  - B) a member selected from the group consisting of water soluble vitamins of and water soluble vitamin derivatives,
  - C) a <u>member selected from the group consisting of positively charged cationic block</u> copolymers and or a positively charged cationic surfactants,
  - D) a clathrate,
  - E) a complexing agent,
  - F) cetrimides,
  - G) a S-layer protein,
- H) Methyl-glucamine; subject to the following provisos
- a) when the adjuvant chemical is selected from A, the composition is for administration to a mucosal surface, or and
- b) when the adjuvant chemical is selected from C, the composition does not contain polyacrylic acid when the particles are polymeric microcapsules, they are either obtainable

using a double emulsion solvent evaporation method or have an adjuvant chemical incorporated at the surface.

## Claims 2-3. (Cancelled)

- 4. (Previously Presented) The composition of claim 1 wherein the adjuvant chemical is selected from one or more of:
  - A) polyornithine having a molecular weight from 5 to 150 kDa,
  - B) vitamin E TPGS (d-alpha tocophenyl polyethylene glycol 1000 succinate),
  - C) a cationic block copolymer or a cationic surfactant, positively charged by means of NH<sub>2</sub><sup>+</sup> groups,
  - D) a complexing agent that forms complexes with fatty acids, or
  - E) cyclodextrin or a derivative thereof.
  - 5. (Cancelled)
- 6. (Previously Presented) The composition of claim 1 wherein the particles are liposomes.
- 7. (Currently Amended) The composition of claim 1 wherein the particles are microcapsules.
- 8. (Currently Amended) The composition of claim 7 wherein the microspheres microcapsules are prepared using a high molecular weight polymer.
- 9. (Previously Presented) The composition according to claim 8 wherein the polymer has a molecular weight of 100 kDa or more.

Fourth Amendment and Response to Office Action Serial No. 09/937,068 Page 4 of 12

10. (Currently Amended) The composition according to any one of claims 7 to 9 wherein the microsphere comprises microcapsules comprise poly-(L-lactide).

11. (Cancelled)

12. (Previously Presented) The composition of claim 1 which is administered to a mucosal surface of an animal or administered parenterally to the animal.

13. (Currently Amended) The composition of claim 2 1 which further comprises a second adjuvant.

Claims 14-25. (Cancelled)

Claims 26-28. (Withdrawn)

29. (Previously Presented) The composition of Claim 1 wherein the adjuvant chemical is a cationic block copolymer or a cationic surfactant, positively charged by means of NH<sub>2</sub><sup>+</sup> groups.

Claims 30-32. (Withdrawn)

33. (New) The composition of claim 7 wherein the adjuvant chemical is coated on the surface of the microcapsule.